

Claims

1. A joint enhancing composition adapted for oral administration, wherein said composition increases the endogenous expression of lubricin by at least 10% relative to an untreated control.

2. The joint enhancing composition of claim 1, wherein said composition comprises at least two substances selected from the group consisting of octacosanol (defatted wheat germ oil), elecampagne root (*Linula*), quercetin, L-cysteine, vitamin B1 (thiamin HCl), white oak bark (*Quercus Alba*), vitamin B5 (pantothenic acid, calcium D-pantothenate), aloe vera gel, black cohosh (*Cimicifuga Racewosh*), androstenedione, oat straw (*Avena Sativa*), oat straw (*Avena Sativa*) powder, L-Methionine, Shitake mushroom (*Lentius Elodes*), bromelain, horsetail (*Equisetum*), and borage oil (*Borago Officianalis*).

3. The joint enhancing composition of claim 2, wherein said composition contains at least three of said substances.

4. The joint enhancing composition of claim 3, wherein said composition contains at least five of said substances.

5. The joint enhancing composition of claim 4, wherein said composition contains at least seven of said substances.

6. The joint enhancing composition of claim 5, wherein said composition contains at least nine of said substances.

7. The joint enhancing composition of claim 6, wherein said composition contains at least eleven of said substances.

8. The joint enhancing composition of claim 7, wherein said composition contains at least thirteen of said substances.

9. The joint enhancing composition of claim 8, wherein said composition contains at least fifteen of said substances.

10. The joint enhancing composition of claim 9, wherein said composition contains octacosanol (defatted wheat germ oil), elecampagne root (*Linula*), quercetin, L-cysteine, vitamin B1 (thiamin HCl), white oak bark (*Quercus Alba*), vitamin B5 (pantothenic acid, calcium D-pantothenate), aloe vera gel, black cohosh (*Cimicifuga Racewosh*), androstenedione, oat straw (*Avena Sativa*), oat straw (*Avena Sativa*) powder, L-Methionine, Shitake mushroom (*Lentius Elodes*), bromelain, horsetail (*Equisetum*), and borage oil (*Borago Officianalis*).

11. The joint enhancing composition of claim 1, comprising oat straw (*Avena Sativa*) SE, oat straw (*Avena Sativa*) powder, bromelain, vitamin B5 (pantothenic acid, calcium D-pantothenate), L-methionine, quercetin, horsetail (*Equisetum*), and borage oil (*Borago Officianalis*).

12. The joint enhancing composition of claim 11, comprising:

from 15 to 25 mg of oat straw (*Avena Sativa*),

from 150 to 170 mg of oat straw (*Avena Sativa*) powder,

from 90 to 110 mg of bromelain (2400 GDU),

from 30 to 40 mg of vitamin B5 (pantothenic acid, calcium D-pantothenate),

from 25 to 40 mg of L-methionine,

from 60 to 75 mg of quercetin,

from 25 to 40 mg of horsetail SE silicic acid, and

from 25 to 40 mg borage oil powder.

13. The joint enhancing composition of claim 12, comprising:
21.5 mg of oat straw (*Avena Sativa*),
160.0 mg of oat straw (*Avena Sativa*) powder,
100.0 mg of bromelain (2400 GDU),
35.0 mg of vitamin B5 (pantothenic acid, calcium D-pantothenate),
33.0 mg of L-methionine,
66.0 mg of quercetin,
33.0 mg of horsetail SE silicic acid, and
33.0 mg of borage oil powder.
14. The joint enhancing composition of claim 12, wherein said oat straw SE is in an initial 10:1 ratio.
15. The joint enhancing composition of claim 12, wherein the initial concentration of said horsetail SE silicic acid is 1.5-3.0 %.
16. The joint enhancing composition of claim 12, wherein said borage oil powder is in gamma lipoic acid (GLA).
17. The joint enhancing composition of claim 12, wherein the initial concentration of said borage oil powder is 6.6%.
18. The joint enhancing composition of claim 1, further comprising a second therapeutic agent.
19. The joint enhancing composition of claim 18, wherein said second therapeutic agent is selected from the group consisting of analgesics, antibiotics, antivirals, anti-inflammatories, anesthetics, enzymes, and immunosuppressive agents.

20. The joint enhancing composition of claim 19, wherein said anti-inflammatory is a non-steroidal anti-inflammatory drug or a corticosteroid.

21. The joint enhancing composition of claim 20, wherein said corticosteroid is triamcinolone, hydrocortisone, fluticasone, or beclomethasone.

22. The joint enhancing composition of claim 19, wherein said anti-inflammatory agent is ketoprofen, auranofin, naproxen, acetaminophen, aspirin, ibuprofen, phenylbutazone, indomethacin, sulindac, diclofenac, paracetamol, diflunisal, Celecoxib, or Rofecoxib.

23. The joint enhancing composition of claim 19, wherein said antibiotic is clindamycin, minocycline, erythromycin, probenecid, or moxifloxacin.

24. The joint enhancing composition of claim 19, wherein said anti-fungal agent is nystatin or Amphotericin B.

25. The joint enhancing composition of claim 19, wherein said anti-viral agent is acyclovir.

26. The joint enhancing composition of claim 19, wherein said analgesic is procaine, lidocaine, tetracaine, dibucaine, benzocaine, p-buthylaminobenzoic acid 2-(diethylamino) ethyl ester HCl, mepivacaine, piperocaine, dyclonine, morphine, codeine, hydrocodone, or oxycodone.

27. The joint enhancing composition of claim 18, wherein said second therapeutic agent is hyaluronic acid, methotrexate, Gold (Myocrisin), Sulphasalazine, Chloroquine, glucosamine, or chondroitin

28. A method of lubricating a joint in a mammal by administering to said mammal a therapeutically effective amount of a joint enhancing composition adapted for

oral administration, wherein said composition increases the endogenous expression of lubricin by at least 10% relative to an untreated control.

29. The method of claim 28, wherein said joint is an articulating joint.

30. The method of claim 29, wherein said articular joint is a knee, hip, ankle, shoulder, or elbow.

31. The method of claim 28, wherein said mammal is a human, a dog, or a horse.

32. The method of claim 28, wherein said increase in endogenous expression of lubricin is in synovial cells of said joint.

33. The method of claim 32, wherein said cells are fibroblasts.

34. A method of treating, reducing, or preventing a degenerative joint disorder by administering to a mammal in need thereof a therapeutically effective amount of a joint enhancing composition adapted for oral administration, wherein said composition increases the endogenous expression of lubricin by at least 10% relative to an untreated control.

35. The method of claim 34, wherein said disorder is osteoarthritis, rheumatoid arthritis, juvenile arthritis, blunt trauma, synovitis, traumatic effusion, lupus, scleroderma, chondromalacia patellae, infectious arthritis, bursitis, tendinitis, fibrositis fibromyositis, or polymyositis

36. The method of claim 35, wherein said increase in endogenous expression of lubricin is in synovial cells of said joint.

37. The method of claim 36, wherein said cells are fibroblasts

38. The method of claim 34, wherein a second therapeutic agent is administered to said mammal.

39. The method of claim 38, wherein said second therapeutic agent is selected from the group consisting of analgesics, antibiotics, antivirals, anti-inflammatories, anesthetics, enzymes, and immunosuppressive agents.

40. The method of claim 39, wherein said anti-inflammatory is a non-steroidal anti-inflammatory drug or a corticosteroid.

41. The method of claim 40, wherein said corticosteroid is triamcinolone, hydrocortisone, fluticasone, or beclomethasone.

42. The method of claim 39, wherein said anti-inflammatory agent is ketoprofen, auranofin, naproxen, acetaminophen, aspirin, ibuprofen, phenylbutazone, indomethacin, sulindac, diclofenac, paracetamol, diflunisal, Celecoxib, or Rofecoxib.

43. The method of claim 39, wherein said antibiotic is clindamycin, minocycline, erythromycin, probenecid, or moxifloxacin.

44. The method of claim 39, wherein said anti-fungal agent is nystatin or Amphotericin B.

45. The method of claim 39, wherein said anti-viral agent is acyclovir.

46. The method of claim 39, wherein said analgesic is procaine, lidocaine, tetracaine, dibucaine, benzocaine, p-buthylaminobenzoic acid 2-(diethylamino) ethyl ester HCl, mepivacaine, piperocaine, dyclonine, morphine, codeine, hydrocodone, or oxycodone.

47. The method of claim 38, wherein said second therapeutic agent is hyaluronic acid, methotrexate, Gold (Myocrisin), Sulphasalazine, Chloroquine, glucosamine, or chondroitin

48. The method of claim 38, wherein said composition and said second therapeutic are administered in the same formulation.

49. The method of claim 38, wherein said composition and said second therapeutic are administered in different formulations.

50. The method of claim 49, wherein said composition and said second therapeutic are administered within 14 days of each other.

51. The method of claim 50, wherein said composition and said second therapeutic are administered within 24 hours of each other.

52. The method of claim 34, wherein said mammal is a human.

53. The method of claim 34, wherein said mammal is a dog.

54. The method of claim 53, wherein said degenerative joint disorder is canine arthritis or canine hip dysplasia.

55. The method of claim 34, wherein said mammal is a horse.

56. The method of claim 55, wherein said degenerative joint disorder is equine degenerative joint disease.